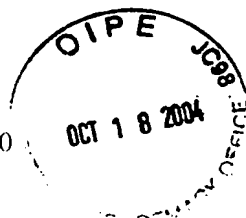


Docket No.: 202443US0



IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :

Veronique CHEVALIER, et al. :

EXAMINER: M. WILLIS

SERIAL NO: 09/784,179 :

FILED: FEBRUARY 16, 2001 :

GROUP ART UNIT: 1619

FOR: COMPOSITION BASED ON
N-CHOLESTERYLOXYCARBONYL-
4-PARA-AMINOPHENOL AND
HYDROQUINONE OR ONE OF ITS DERIVATIVES

DECLARATION UNDER 37 C.F.R. 1.132

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

SIR:

I, Veronique CHEVALIER, hereby declare:

1. I am employed by L=ORÉAL as an engineer and have experience with skin depigmenting and/or lightening agents.
2. The following observations and experiments were carried out by me or under my direct supervision and control.
3. The depigmentation activity of combinations of compounds was determined using the techniques set forth in Example 1 of the present application. In accordance with the claimed invention, the depigmentation activity of N-cholesteryloxy carbonyl-4-para-aminophenol (6.77×10^{-5}) and hydroquinone (different concentrations) was determined. These results are set forth below.

	% inhibition observed	% inhibition theoretical
N-cholesteryloxy carbonyl-4-para-aminophenol (6.77×10^{-5})	0.55	
Hydroquinone (4×10^{-5} M)	15.48	
Hydroquinone (4×10^{-5} M) N-cholesteryloxy carbonyl-4-para-aminophenol (6.77×10^{-5})	21.35	16.03
Hydroquinone (12×10^{-5} M)	55.35	
Hydroquinone (12×10^{-5} M) + N-cholesteryloxy carbonyl-4-para-aminophenol (6.77×10^{-5} M)	63.55	55.90

4. As shown above, the claimed combination of hydroquinone and N-cholesteryloxy carbonyl-4-para-aminophenol resulted in synergistic inhibition activity at different hydroquinone concentration levels. Specifically, for hydroquinone concentrations of 4×10^{-5} M, the actual inhibition was 21.35% (as opposed to 16.03% theoretical). For hydroquinone concentrations of 12×10^{-5} M, the actual inhibition was 63.55% (as opposed to 55.90% theoretical). As noted in my earlier declaration submitted in this case, for hydroquinone concentrations of 8×10^{-5} M, the actual inhibition was 31.8% (as opposed to 24.4% theoretical).

5. All of these results demonstrate that the claimed combination of hydroquinone and N-cholesteryloxy carbonyl-4-para-aminophenol results in synergistic inhibition activity at different hydroquinone concentration levels. I have no reason to believe that such synergistic inhibition activity would not also be achieved using different concentration levels of N-cholesteryloxy carbonyl-4-para-aminophenol.

6. Also as noted in my earlier declaration, the combination of hydroquinone and a different aminophenol derivative, N-ethyloxy carbonyl-4-paraaminophenol, did not result in synergistic inhibition activity and, in fact, resulted in less than additive activity (16.48% actual inhibition vs. 39.76% theoretical).

7. The difference in inhibition activity between the claimed hydroquinone/N-cholesterylloxycarbonyl-4-para-aminophenol combination and the comparative combination was unexpected and surprising, and demonstrates the improved depigmentating activity of the synergistic combination of the present invention.

8. The undersigned petitioner declares further that all statements made herein of her own knowledge are true and that all statements made on information and belief are believe to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

9. Further deponent sayeth not.

CHEVALIER Veronique
Name

Chevalier Veronique
Signature



18th October 2004
Date